

Title (en)  
GRAPHITE NANOFIBER CATALYST SYSTEMS FOR USE IN FUEL CELL ELECTRODES

Title (de)  
GRAPHIT-NANOFASER-KATALYSATORSYSTEME ZUR VERWENDUNG IN BRENNSTOFFZELLENELEKTRODEN

Title (fr)  
SYSTEMES DE CATALYSE A NANOFIBRES DE GRAPHITE DESTINES A ETRE UTILISES DANS DES ELECTRODES POUR PILES A COMBUSTIBLE

Publication  
**EP 1314213 A4 20060628 (EN)**

Application  
**EP 00971080 A 20000831**

Priority

- US 0040802 W 20000831
- US 64341800 A 20000822

Abstract (en)  
[origin: WO0217427A1] Graphite nanofiber catalyst systems for use in the production of fuel cell electrodes. The graphite nanofibers are comprised of graphite sheets aligned either substantially perpendicular or substantially parallel to the longitudinal axis of the nanofiber. The graphite nanofibers contain exposed surfaces of which at least about 95 % of said exposed surfaces are comprised of edge sites.

IPC 1-7  
**H01M 4/86; H01M 4/90; H01M 4/96; B32B 9/00; D02G 3/00**

IPC 8 full level  
**B32B 9/00** (2006.01); **D02G 3/00** (2006.01); **H01M 4/86** (2006.01); **H01M 4/88** (2006.01); **H01M 4/90** (2006.01); **H01M 4/92** (2006.01);  
**H01M 4/96** (2006.01); **H01M 8/10** (2006.01)

CPC (source: EP US)  
**H01M 4/92** (2013.01 - EP US); **H01M 4/926** (2013.01 - EP US); **H01M 8/1007** (2016.02 - EP US); **H01M 4/921** (2013.01 - EP US);  
**Y02E 60/50** (2013.01 - EP); **Y02P 70/50** (2015.11 - EP US); **Y10S 977/775** (2013.01 - EP US); **Y10S 977/948** (2013.01 - EP US)

Citation (search report)

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- [Y] US 6099960 A 20000808 - TENNENT HOWARD [US], et al
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- [Y] WO 9105089 A1 19910418 - HYPERION CATALYSIS INT [US]
- [Y] RODRIGUEZ N M: "A REVIEW OF CATALYTICALLY GROWN CARBON NANOFIBERS", JOURNAL OF MATERIALS RESEARCH, MATERIALS RESEARCH SOCIETY, WARRENDALE, PA, US, vol. 8, no. 12, December 1993 (1993-12-01), pages 3233 - 3251, XP009037142, ISSN: 0884-2914
- See references of WO 0217427A1

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**US 0040802 W 20000831**; CA 2420315 A 20000831; EP 00971080 A 20000831; US 64341800 A 20000822